

STATE ROUTE 16: TACOMA NARROWS BRIDGE PROJECT

**Tacoma Narrows Bridge Project
Nighttime Construction Noise
Quarterly Report – January – March 2003**

*Submitted on April 15, 2003 to:
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INTRODUCTION

The Washington State Department of Transportation (WSDOT) and Tacoma Narrows Constructors have been issued a noise variance by the Tacoma-Pierce County Health Department for noise levels expected to result from construction work between the hours of 10:00 p.m. and 7:00 a.m. in conjunction with the construction of the new Tacoma Narrows Bridge. The variance issued is valid through November 30, 2003 and was issued with several conditions, including that WSDOT provide quarterly reports to the Health Department on activities relevant to the variance.

This is the first quarterly report and covers the period including January through March 2003. The following areas are addressed in this report:

?? Overview of Nighttime Construction Activities

?? Communication Activities

?? Complaint Response & Resolution

?? Temporary Concrete Batch Plant

?? Upcoming Activities

?? Attachments

1. Nighttime construction activities
2. Public Mailings
3. Complaints
4. Temporary Concrete Batch Plant
 - A. Noise Measurements
 - B. Photos – Noise Wall Installation
5. Baseline Noise Measurements

OVERVIEW OF NIGHTTIME CONSTRUCTION ACTIVITIES – JANUARY – MARCH '03

Project nighttime construction activities were initiated on January 30, 2003. Construction work took place on a total of 28 nights during the period including January, February, and March 2003. All nighttime construction work during this period took place along the SR 16 roadway on the Pierce County side of the Narrows, between 36th Street and the Narrows. Specific descriptions of the type, location, and times of this work are provided in Attachment 1 to this report.

During this period, one complaint was received attributed to construction noise from the project.

COMMUNICATION ACTIVITIES

> INFORMATION & HOT LINE

A telephone information and “hot” line has been operational since January 29, 2003 to provide information about upcoming nighttime construction activities, as well as provide residents an opportunity to communicate at any time with a live person about questions and/or concerns relating to the project nighttime construction activities and noise. This service is functional 24 hours a day, 7 days per week. The phone number is 253-620-4440.

Nighttime construction activity information is provided in a recorded message that is updated on a daily basis to provide access to the most current information. Messages can also be left on the information line concerning the nighttime construction activities and these messages will be responded to within 24 hours (on project working days).

Residents can also communicate directly with a person who can provide relevant information about project nighttime construction activities, receive comments, and if appropriate, directly contact WSDOT project staff. When project construction activities are taking place, the person staffing the “hot line” is able to immediately contact WSDOT project staff so as to relay comments/complaints received. If requested by the caller, WSDOT project staff will return their call as soon as feasible.

> WEBSITE

To maximize public access to timely information about nighttime construction activities, a section of the project’s web site is dedicated to providing quick, easy access to information concerning nighttime construction activities. Information on this web site is updated daily to provide the most current information.

Comments and concerns about the nighttime construction activities can be submitted to project staff through the web site and will be responded to within 24 hours (on project working days).

> POSTAL CARRIER ROUTE MAILINGS

As described in the Communication Plan for Nighttime Construction Noise, information sheets have been delivered by postal carrier routes to residences and businesses in and surrounding the project corridor.

Prior to each calendar month, residents along the project corridor have been mailed notification flyers about nighttime work activities that are scheduled to take place

during the upcoming month. Monthly mailings have been conducted for February, March, and April.

On a weekly basis, if activities will be different than described in the monthly notification, residents located in the specific geographic area (work zone) of nighttime construction work have been mailed an updated notification of activities that are scheduled to take place during the following week(s). Updated flyers have been mailed two times during this period.

On one occasion, it was determined that an updated notification sheet was appropriate and there was not adequate time for delivery through the mail. In this case, notification flyers were provided directly to the Madrona Woods Neighborhood Association for distribution to their residents.

Copies of the notification flyers distributed to date are provided in Attachment 2.

COMPLAINT RESPONSE & RESOLUTION

Since construction work started on the project in December 2002, two complaints have been received attributed to construction noise from the project.

The first complaint was received on December 18, 2002 with regard to demolition of a house which began at 7:00 a.m. A neighbor to the demolition works nights and sleeps during daytime hours. This demolition was a one time event.

A complaint was received from a resident on the Tacoma side of the Narrows about "severe concussions lasting approximately 30 minutes" taking place on March 21, 2003 at 8:00 p.m.. Work was underway (placement of signs) on the project site in the vicinity of 24th Street on the Gig Harbor side of the Narrows. No project work was being conducted at the time of the complaint either in the Narrows or on the Tacoma side of the Narrows.

Additional specifics from both of these complaints are provided in Attachment 3 to this report.

TEMPORARY CONCRETE BATCH PLANT

A temporary concrete batch plant has been built adjacent to SR 16 just off the west end of the Narrows Bridge at 14th Street. The plant has been built with predominately new equipment and extensive use of sound dampening materials including rubber chute liners. It has been operational since March 24th, but regular concrete production has not yet been initiated.

Test runs of the plant have been conducted and noise measurements taken. Noise readings taken 50 feet from the plant have ranged between 67 - 74 decibels. Data

sheets for these measurements are included in Attachment 4-A. This is notably less than the estimate of 85-90 decibels as described in the application for the noise variance. Noise from normal vehicle traffic on 14th Street has been measured at 74 - 76 decibels.

A temporary wall has been constructed along the east (14th Street) side of the batch plant to provide noise mitigation. Attachment 4-B to this report includes photographs of the temporary batch plant and the associated noise mitigation wall. Noise measurement data sheets are also included. These measurements were taken before installation of the noise mitigation wall.

UPCOMING ACTIVITIES

During the upcoming quarter, April through June '03, construction activities will be increasing throughout the project, including in the Narrows. Work barges are now in place in the Narrows beginning preparatory work for the new bridge caissons. This work will include dredging and placement of rip-rap armoring on the bottom of the Narrows. As a result of both tidal effects and necessary production rates, this work will be conducted using two daily work shifts. This will result in construction activities during nighttime hours.

Construction of the new 24th Street bridge will continue during this period. The placement of concrete girders over the existing SR 16 lanes is scheduled to take place in late May. This will be a nighttime activity due to the requirement to temporarily halt traffic on SR 16 while the girders are placed.

Installation of a temporary construction walkway on the existing Narrows Bridge began in early April and will continue during this period. This walkway will provide access for construction workers from the shorelines to the existing bridge towers and then down to the existing caissons. In addition, these walkways will support the "slick-lines" through which concrete will be pumped from the vicinity of the existing bridge anchorages out to the new bridge caissons. Concrete pumps will be installed near each existing bridge anchorage. Shielding will be placed around these pumps for noise mitigation.

The first caisson is scheduled to be moved from the Port of Tacoma to the Narrows in late June to begin on-site caisson construction. This first on-site caisson work will be on the Tacoma side of the Narrows. The formwork and concrete pours for this caisson construction will include nighttime construction activities. Concrete for this caisson will be trucked from the temporary concrete batch plant across the Narrows Bridge to a concrete pump located near the existing bridge anchorage.